



Patent
Attorney Docket No.: 233499-100007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Inventor: **David Lee Daskocil**

Serial No.: **10/817,368**

Filed: **April 5, 2004**

For: **LEVEL LIFT TRAILER WITH
DETACHABLE CARGO BED**

) Confirmation No.: **2622**
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) Group Art Unit: **3652**
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) Examiner: **Gina M. Lupino**
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APPEAL BRIEF

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This brief is an appeal from the Final Office Action mailed December 13, 2006, finally rejecting claims 9-20. A Notice of Appeal was filed by Express Mail on June 13, 2007, the time for filing this Appeal Brief thereby being set for August 13, 2007. Accordingly, a petition for a four month extension of time accompanies this Appeal Brief. It is submitted that the application and claims are properly formed and the issues distilled and ripe for appeal.

CERTIFICATE OF MAILING (37 C.F.R. §1.10)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as 'Express Mail Post Office To Addressee' in an envelope addressed to the Mail Stop Appeal Brief - Patent, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Yolanda G. Ybuan
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Yolanda G. Ybuan
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A Notice of Abandonment was mail December 3, 2007 for no response to the December 13, 2006 Office Action. Applicant respectfully disagree for the reason that a Notice of Appeal and appropriate fee were timely filed (6 months from the December 13, 2006 Final Office Action). Applicant respectfully request that the status of Abandonment been removed.

I. REAL PARTY IN INTEREST

The real party in interest is David Lee Dorskocil, the inventor of the present application.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Pending Claims & Claims on Appeal:

Claims 9-20 are currently pending in the present application, with claims 9, 10 and 18 being independent claims. Each of the claims stand rejected under 35 U.S.C. § 103(a). There are no other grounds of rejection. Claims 9-20 are on appeal.

Cancelled & Withdrawn Claims:

Claims 1-8 were cancelled in a Preliminary Amendment mailed March 29, 2006 and entered March 31, 2006.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the Final Office Action mailed on December 13, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 9, as new added claim in the Preliminary Amendment of March 31, 2006, is directed to a detachable level lifting trailer system comprising: a) a trailer, wherein said trailer comprises a framed structure with an open end and an open space in the center; b) a cargo bed sized

to fit into said open space, said cargo bed comprises two side walls; and c) means for engaging said trailer and said cargo bed, said means for engaging includes a plurality of lifting rollers disposed to said framed structure of said trailer, a plurality of inclined channel tracks disposed to said side walls of said cargo bed, a plurality of horizontal channel extensions each coupled to one of said inclined channel tracks, and a horizontal pull hydraulic cylinder coupled to said trailer and said cargo bed for raising up said cargo bed to a transporting position and lowering down said cargo bed to a ground position, said inclined channel tracks and said horizontal channel extensions sized to receive and guide said lifting rollers.

Independent claim 10, as new added claim in the Preliminary Amendment, is directed to a detachable level lifting trailer system comprising: a) a trailer, wherein said trailer comprises a framed structure with an open end and an open space in the center, said framed structure comprises two parallel side frames and a head structure coupled to said parallel side frames; said framed structure further comprises a plurality of lifting rollers disposed to said side frames; and b) a cargo bed comprises two side walls, said side walls comprises a plurality of inclined channel tracks disposed to said side walls and a plurality of horizontal channel extensions each coupled to one of said inclined channel tracks, each of said inclined channel track and said horizontal channel extension is sized to receive one of said lifting rollers.

Independent claim 18, as new added claim in the Preliminary Amendment, is directed to a cargo bed assembly for use with a level lifting trailer system comprising a) a cargo bed; b) two cargo side walls; c) a cargo head end; d) a channel end opposite to said cargo head end; and e) a plurality of inclined channel tracks angled substantially at 45 degrees, each of said inclined channel track is parallel to one another and disposed on the outer surface of said cargo side walls, each of said inclined channel track couple to a horizontal channel extension disposed to said cargo side walls purposed to receive a lifting roller mounted on said trailer and guide said lifting roller from said cargo head end of said cargo bed and extending to the upper ends of said inclined channel tracks.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claim 9 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Shiels (US Patent No. 4,673,328) in view of Koller (US Patent No. 5,059,085) and Harris (US Patent No. 5,288,197).

Claims 10, 11-13, 16, and 18-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shiels (US Patent No. 4,673,328) in view of Koller (US Patent No. 5,059,085).

Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Shiels (US Patent No. 4,673,328) in view of Koller (US Patent No. 5,059,085) and Harris (US Patent No. 5,288,197).

Claim 15 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Shiels (US Patent No. 4,673,328) in view of Koller (US Patent No. 5,059,085), Harris (US Patent No. 5,288,197) and Stanley (US Patent No. 5,829,945).

Claim 17 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Shiels (US Patent No. 4,673,328) in view of Koller (US Patent No. 5,059,085) and Sobina (US Patent No. 5,630,693).

VII. ARGUMENT

A. Introduction

The invention here is generally directed to the field of hauling cargo on highways with motor vehicles and more specifically to cargo carried with trailers. To place the invention in the proper context so that it may be fully appreciated, a short discussion of the prior art, specifically the five cited references, as they relate to the development of the trailers with cargo bed art is believed in order.

1. Early Trailers Were Non-Practical

As explained in the Background Section of the subject application, earlier designs of trailer are not practical for unpacked cargoes, nor can they be used to load or unload live animals. Some solutions are suggested. For example, a lifting/lowering trailer with a system of cams and links, or a level lift trailer bed that kept in alignment by inner sliding telescoping guides as it is lifted by hydraulic cylinders at each corner of the chassis. In each of these devices, the cargo or load carrying member is a permanent integral part of the trailer. US Patent No. 4,930,799 to Pihlstrom discloses a tilting frame trailer that is able to interchange a cargo carrier. But, this system can not lift a loaded cargo carrier. Therefore, there is a strong desire for a simple, reliable and heavy capacity level lifting trailer system capable of detaching from its cargo bed, or from an interchangeable bed, in some other configurations.

2. US Patent No. 4,673,328 to Shiels

Shiels discloses an apparatus for raising a trailer bed from or lowering to the ground in a single step while maintaining a substantially horizontal attitude relative thereto. Shiels also discloses an apparatus for tilting the trailer bed which is normally positioned parallel to the ground when the trailer is in its traveling mode for the purpose of loading or unloading the bed without substantial change in the orientation of the trailer "U"-frame in which the bed is located. Four pivotable tracks attached to the frame and corresponding roller wheels attached to the bed cooperate to achieve the desired motion. (Shiels, Abstract)

3. US Patent No. 5,059,085 to Koller

Koller discloses a trailer with tiltable beds which makes loading and unloading easier. More particularly, a trailer with a wheeled undercarriage, a towbar, a frame which is releasably attached to

and suspended from the towbar and a platform that can be tilted downward at both the front end and the rear end of the trailer. (Koller, Abstract)

4. US Patent No. 5,288,197 to Harris

Harris discloses an equipment trailer particularly designed to transport as many as two forklifts at one time, having a trap door in the bed so that a forklift may be positioned on the trailer for maintenance to the lower portions of the forklift. The bed of the trailer is mounted within a U-shaped frame which has lifting mechanisms at the front and rear of the trailer to tilt the trailer bed as desired by the operator. The bed may be locked in a travel position to the arms of the U-shaped frame in such a way that excessive torque or longitudinal twisting couplings are not exerted upon the arms. (Harris, Abstract)

5. US Patent No. 5,829,945 to Stanley

Stanley discloses a roll-out deck apparatus is fitted to a pick-up truck, for loading/unloading a snowmobile etc. The deck may be tilted about a hinge pivot at the rear edge of the truck, whereby the deck forms a ramp, up and down which the snowmobile may be manipulated. The apparatus includes an electric winch, located at the front end of the deck, for raising and lowering the deck, about the hinge pivot. A sub-frame of the apparatus is directly hinged to the rear edge of the truck bed; the sub-frame can undergo pivoting or tilting movement about the hinge pivot. A deck-frame is telescopic with respect to the sub-frame, but is otherwise locked to the sub-frame, whereby when the sub-frame tilts the deck-frame tilts in unison. (Stanley, Abstract)

6. US Patent No. 5,630,693 to Sobina

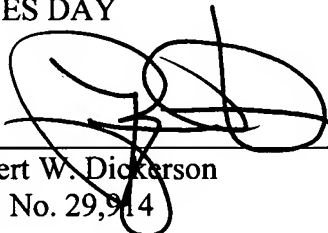
Sobina discloses a vehicle, either powered or a trailer (1), having a yoke or U-shaped chassis (2) and a drop tray (3) with a tailgate (4) at the rear of the chassis (2) either hinged to the sidewall (6) or to the drop tray decking (5). The tray (3) has parallel posts (13) extending in a general upward

direction while the chassis (2) has hollow tubes (12), which mate with the parallel posts (13). Any suitable lifting mechanism could be employed, however hydraulic cylinders (21) are preferable located at each corner of the chassis (2), to operate simultaneously to raise and lower the tray (3) such that it maintains substantially the same orientation throughout its movement between its transport position, above the ground, and its loading position, in which the tray (3) engages the ground. (Sobina, Abstract)

- B. The Combination of Shields (US Patent No. 4,673,328), Koller (US Patent No. 5,059,085) and Harris (US Patent No. 5,288,197) Do Not Render Obvious Claims 9 and 14.**
- C. The Combination of Shields (US Patent No. 4,673,328) and Koller (US Patent No. 5,059,085) Do Not Render Obvious Claims 10, 11-13, 16, and 18-20.**
- D. The Combination of Shields (US Patent No. 4,673,328), Koller (US Patent No. 5,059,085), Harris (US Patent No. 5,288,197) and Stanley (US Patent No. 5,829,945) Do Not Render Obvious Claims 9 and 14.**
- E. The Combination of Shields (US Patent No. 4,673,328), Koller (US Patent No. 5,059,085), Harris (US Patent No. 5,288,197) and Sobina (US Patent No. 5,630,693) Do Not Render Obvious Claims 9 and 14.**

Respectfully submitted,

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Dated: December 13, 2007

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VIII. CLAIMS APPENDIX

Claim 9. A detachable level lifting trailer system comprising:

- a) a trailer, wherein said trailer comprises a framed structure with an open end and an open space in the center;
- b) a cargo bed sized to fit into said open space, said cargo bed comprises two side walls; and
- c) means for engaging said trailer and said cargo bed, said means for engaging includes a plurality of lifting rollers disposed to said framed structure of said trailer, a plurality of inclined channel tracks disposed to said side walls of said cargo bed, a plurality of horizontal channel extensions each coupled to one of said inclined channel tracks, and a horizontal pull hydraulic cylinder coupled to said trailer and said cargo bed for raising up said cargo bed to a transporting position and lowering down said cargo bed to a ground position, said inclined channel tracks and said horizontal channel extensions sized to receive and guide said lifting rollers.

Claim 10. A detachable level lifting trailer system comprising:

- a) a trailer, wherein said trailer comprises a framed structure with an open end and an open space in the center, said framed structure comprises two parallel side frames and a head structure coupled to said parallel side frames; said framed structure further comprises a plurality of lifting rollers disposed to said side frames; and
- b) a cargo bed comprises two side walls, said side walls comprises a plurality of inclined channel tracks disposed to said side walls and a plurality of horizontal channel extensions each coupled to one of said inclined channel tracks, each of said inclined channel track and said horizontal channel extension is sized to receive one of said lifting rollers.

Claim 11. The detachable level lifting trailer system of claim 10, wherein said lift rollers are disposed on the inner side of said side frames.

Claim 12. The detachable level lifting trailer system of claim 10, wherein a lifting roller disposed near to said open end of said trailer is at a position higher than that disposed near to said head structure.

Claim 13. The detachable level lifting trailer system of claim 10, wherein said trailer further comprises a tongue structure coupled to said head structure.

Claim 14. The detachable level lifting trailer system of claim 13, wherein said trailer further comprises a horizontal pull hydraulic cylinder coupled to said tongue structure of said trailer and said cargo bed for raising up said cargo bed to a transporting position.

Claim 15. The detachable level lifting trailer system of claim 14, wherein said trailer further comprises a plurality of spring loaded pin locks, each of said spring loaded pin lock is able to extend into one of said inclined channel tracks to retain said cargo bed in said transporting position without a continuous pulling force from said hydraulic cylinder.

Claim 16. The detachable level lifting trailer system of claim 10, wherein said side frames are structure beams.

Claim 17. The detachable level lifting trailer system of claim 10, wherein said trailer further comprises a leaf spring suspended on a plurality of quarter axles with pneumatic tires.

Claim 18. A cargo bed assembly for use with a level lifting trailer system comprising

- a) a cargo bed;
- b) two cargo side walls;
- c) a cargo head end;
- d) a channel end opposite to said cargo head end; and
- e) a plurality of inclined channel tracks angled substantially at 45 degrees, each of said inclined channel track is parallel to one another and disposed on the outer surface of said cargo side walls, each of said inclined channel track couple to a horizontal channel extension disposed to said cargo side walls purposed to receive a lifting roller mounted on said trailer and guide said lifting roller from said cargo head end of said cargo bed and extending to the upper ends of said inclined channel tracks.

Claim 19. The cargo bed assembly of claim 18, wherein a horizontal channel extension coupled to a inclined channel track near to said cargo head end has a lower position than a horizontal channel extension coupled to a inclined channel track near to said channel end.

Claim 20. The cargo bed assembly of claim 19, wherein each of said horizontal channel extension has a larger opening near to the end of said cargo head end than that near to the end of said channel end to facilitate engagement by said lifting rollers.

IX. RELATED PROCEEDINGS APPENDIX

None